

FACULTY OF ENGINEERING & TECHNOLOGY
M.E.(CSE/SOFTWARE)Year Examination-June-2015
Performance Analysis & Simulation
(Revised)

Time: Three Hours

Maximum Marks: 80

“Please check whether you have got the right question paper.”

- i) Solve any two questions from each section.
ii) Assume suitable data wherever necessary and state it clearly.

SECTION-A

- Q.1 a) Discuss and explain the steps common the all performance evolution projects that helps to avoid common mistakes. 10
b) What is work load characterization? Explain different technique that have been used in the past for work load characterization. 10
- Q.2 a) Explain common considerations for correct selection of performance metrics. 10
b) Explain the architectural structure of IBM DB₂ with respect the 10
1) Memory management
2) Concurrency control & locking.
- Q.3 a) Compare software and hardware monitors. Explain the issues in software monitor design. 10
b) Evaluate two operation systems LINUX and windows ME based on system architecture &work loads. 10

SECTION-B

- Q.4 a) List and explain the circumstances under which simulation is the appropriate tool and when simulation is not appropriate. 10
b) List different types of tests for random number. A sequence of 1000 three digit numbers has been generated and an analysis indicates that 680 have three different digits 289 contain exactly one pair of like digit. Based on the poker test, are these number independent? 10
- Q.5 a) What is the test for uniformity? Explain in detail the chi-square test with example. 10
b) Explain the validation of input output using historical input data with an example. 10
- Q.6 a) Explain in detail the verification of simulation models. 10
b) Explain the following 10
1) Component of system
2) Model of system
3) Types of models
4) Types of system.